

# DWR Climate News Digest

January 11<sup>th</sup> - March 23<sup>rd</sup>, 2013

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The information provided herein is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management. The links provided herein are intended to provide educational and thought-provoking material for water managers and water users.

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TOPICS [Find older items in the [Climate News Archive](#)]

## **Reports**

### **[Climate Extremes: Recent Trends with Implications for National Security](#)**

[Harvard University Center for the Environment - February 2013] ("*...the early ramifications of climate extremes resulting from climate change are already upon us and will continue to be felt over the next decade, directly impacting U.S. national security interests*")

### **[Wildlife in a Warming World - Confronting the Climate Crisis](#)**

[National Wildlife Federation - January 2013] ("*we need to protect our communities from climate-fueled weather extremes by making smarter development investments, especially those that employ the natural benefits of resilient ecosystems*")

**[Draft National Climate Assessment Report - PUBLIC REVIEW DRAFT](#)** [U.S. Global Change Research Program - December 2013] (*public comment period open until **April 12th, 2013***)

**[Coastal Impacts, Adaptation, and Vulnerabilities: A Technical Input to the 2013 National Climate Assessment](#)** [USGS/NOAA - January 28, 2013]

[report] **[Food, Water, and Energy: Know the Nexus](#)**

[GRACE Communications Foundation - 2013] ("*Recent events like droughts, oil spills and increasing food prices tell us that we can no longer view our food, water, and energy systems in isolation. Instead, we must all understand where these three systems intersect - the **nexus***")

## **[Heavy Weather: How Climate Destruction Harms Middle-and Lower-Income Americans](#)**

[Center for American Progress - November 2012]

### **[Published Literature](#)**

#### **[A reconstruction of regional and global temperature for the past 11,300 years](#)**

[Science - March 8, 2013] (*abstract only*)

#### **[Examining the feasibility of converting New York State's all-purpose energy infrastructure to one using wind, water, and sunlight](#)**

[Elsevier (Stanford) - February 2013]

#### **[Global warming in an independent record of the past 130 years](#)**

[Geophysical Research Letters - January 16, 2013] (*abstract only*)

#### **[Ground water and climate change](#)**

[Nature Climate Change - November 2012] (*abstract only*)

### **[Sea-level Rise and other Ocean Impacts](#)**

#### **[New maps depict potential worldwide coral bleaching by 2056](#)**

[Science Daily - February 25, 2013]

#### **[Reduced sea ice disturbs balance of greenhouse gases](#)**

[Science Daily - February 18, 2013]

#### **[New projections of 'uneven' global sea level rise](#)**

[Science Daily - February 18, 2013]

#### **[The 'New Arctic': Thinning ice is changing ecosystem](#)**

[Live Science - February 14, 2013]

#### **[European satellite confirms UW numbers: Arctic Ocean is on thin ice](#)**

[University of Washington - February 13, 2013]

#### **[Scientists alarmed by rapidly shrinking Arctic ice cap](#)**

[Physics Today - February 2013]

#### **[San Francisco a test case for coping with rising seas](#)**

[KQED - February 1, 2013]

#### **[Preparing the bay for rising sea levels](#)**

[SF Gate - January 19, 2013]

### **[Agriculture/Food Production](#)**

#### **[Improving climate protection in the agricultural sector](#)**

[Science Daily - February 28, 2013]

#### **[California farmers examine climate change issues](#)**

[Modesto Bee - January 28, 2013]

### **[General Water Management](#)**

#### **[Sierra water projects outlined](#)**

[Modesto Bee - February 26, 2013]

### **Water: Lake Powell may dry up within a few decades**

[Summit Country Voice - February 24, 2013] (the authors of a new study found that "...climate change is likely to have a much greater effect on future water demands than population growth")

### **Central Valley irrigation intensifies rainfall, storms across the Southwest**

[Environmental Research Web - February 6, 2013]

**Groundwater fate and climate change** [PhysOrg - January 28, 2013] (*increasing food requirements to feed the world's growing population, prolonged droughts, and inadequate management and monitoring of groundwater usage means that we "may see significant groundwater depletion and contamination that will seriously compromise much of the world's agriculturally-grown food supply"*)

## **Floods**

### **California megaflood: Lessons from a forgotten catastrophe**

[Scientific American - January 19, 2013]

## **Drought**

### **Monsoon failure key to long droughts in Southwest** [Science Daily - March 11, 2013]

### **U.S. drought intensifies in Texas and Florida** [Climate Central - March 7, 2013]

[website] **North American Drought: A Paleo Perspective** [NCDC/NOAA] (*The story of North American drought is put into various perspectives including the last 500 years, the last 2000 years, and longer time periods*)

### **Drought forecast to persist in much of the U.S., especially in the West**

[LA Times - February 21, 2013]

### **Climate change-driven megadroughts jeopardizing Amazon forest**

[The Energy Collective - January 21, 2013]

## **Water/Energy Nexus**

**Water demand for energy to double by 2035** [National Geographic - January 30, 2013] (*"The win-win of the water-energy nexus is that saving energy saves water"*)

### **[report] Food, Water, and Energy: Know the Nexus**

[GRACE Communications Foundation - 2013] ("Recent events like droughts, oil spills and increasing food prices tell us that we can no longer view our food, water, and energy

systems in isolation. Instead, we must all understand where these three systems intersect - the *nexus*")

### **Wildlife and Ecosystem Impacts**

[Tropical forests unexpectedly resilient to climate change](#) [Nature - March 10, 2013]

[Coldness triggers northward flight in monarch butterflies: Migration cycle may be vulnerable to global climate change](#) [Science Daily - February 21, 2013]

[Are hybrid species being created due to climate change?](#)

[Mother Nature Network - February 14, 2013]

[Profiting from climate change](#) [EurekaAlert - February 6, 2013](tiny foraminifera are stabilizing coastlines and reefs with their calcareous shells, which will contribute to future resilience of ocean ecosystems)

[Climate crisis deepens for America's moose](#) [National Wildlife Federation - February 6, 2013]

[Report: Climate change a threat to wildlife](#) [USA Today - January 30, 2013]

[Climate change endangers elephants, study says](#) [PhysOrg - January 28, 2013](*increasing temperatures and decreasing monsoon months will increase elephant mortality, especially among the calves*)

[Climate change projected to alter Indiana bat maternity range](#)

[Science Codex - January 28, 2013]

[American Fisheries Society letter to President Obama on climate change](#)

[American Fisheries Society - January 17, 2013]

### **Greenhouse Gas Mitigation**

[report] [Greenhouse Gas Mitigation Options and Costs for Agricultural Land and Animal Production within the United States](#) [USDA - February 2013]

[Mitigating climate change? Guiding responsible research in geoengineering](#)

[Science Daily - March 14, 2013]

[Green energy solves dual crisis of poverty and climate](#) [IPS news - February 25, 2013] (*"Poverty eradication, sustainability development and the transition away from fossil fuel energy go hand in hand" says Joeri Rogelj of the Institute for Atmospheric and Climate Science in Zurich*)

[Geoengineering by coalition to mitigate global warming](#) [Science Daily - February 21, 2013]

[Sea urchin nickel 'trick' could be key to capturing carbon](#) [BBC - February 4, 2013] (*a new method of sequestering CO<sub>2</sub> has been developed based on the way sea urchins create their calcium carbonate shells*)

## **Climate Adaptation**

[EBM Tools Network - Tools for Coastal Climate Adaptation Planning](#)

[Natureserve.org - March 2013]

## **International Planning**

['Climate-smart strategies' proposed for spectacular US-Canadian landscape](#)

[Science Daily - March 7, 2013]

[Bangladesh tackles climate change by fusing rice paddies with fish farms](#)

[The Guardian - March 1, 2013]

[Birds affected by climate change, says international study](#) [Times of India - February 5, 2013]

[India embraces climate change](#) [UK Progressive - January 28, 2013]

[Filipino government makes climate change a top 2013 priority](#) [AlertNet - January 27, 2013]

[Climate change adaptation in rural India: A green infrastructure approach](#)

[WRI Insights - January 24, 2013]

## **Climate Change Modeling**

[Are climate change models becoming more accurate and less reliable?](#)

[Scientific American - February 27, 2013]

## **Legislative Updates**

[Energy and environmental bills before Washington, Oregon and California Legislatures](#)

[Marten Law - March 6, 2013]

## **BLOGS/Commentary**

Ryan Koronowski on "[NOAA: 'Robust, unambiguous' independent evidence confirms the recent global warming measured by thermometers](#)" [Climate Progress - March 20, 2013]

David Wogan on "[Earth has been this warm before - what's different now?](#)"

[Scientific American - March 19, 2013]

Andrew Revkin on "[Can wind, water and sunlight power New York by 2050?](#)"

[New York Times - March 12, 2013]

Peter Gleik on "[An inevitable headline in 2014: 'Planet's CO2 level reaches 400 ppm for the first time in human existence'](#)" [Science Blogs - March 7, 2013]

Alan Kesselheim on "[Essay: Why is it so hard?](#)" [The Daily Climate - February 26, 2013] (*the author wonders "why is it so hard, at every level, to do anything to stop torquing the climate?"*)

Denis Hayes on "[Five things the President should do to tackle climate change](#)"

[Climate Progress - February 14, 2013]

Deron Lovaas on "[Preparing transportation for climate change: We are not ready](#)"

[Natural Resources Defense Council - January 30, 2013]

Carter Eskew on "[The effects of climate change have arrived ahead of schedule](#)"

[Washington Post - January 25, 2013]

David Wogan on "[Weekend reading: 'What we know about climate change'](#)"

[Scientific American - January 18, 2013]

Jeff Goodell on "[Obama's climate challenge](#)" [Rolling Stone - January 17, 2013]

Joe Romm on "[Videos and charts make clear the planet is still warming - and there's only one way to stop it](#)" [Think Progress - January 10, 2013]

### **Additional Items of Interest**

[PCAST releases new climate report](#) [White House - March 22, 2013] (*The President's Council of Advisors on Science and Technology (PCAST) released a letter to President Obama describing six key components the advisory group believes should be central to the Administration's strategy for addressing climate change*)

[Climate change pegged as biggest threat to Pacific security by US Navy commander](#)

[The Verge - March 12, 2013]

[Federal agencies tackle climate change](#) [Roll Call - March 12, 2013]

[Global warming has already caused unprecedented change](#) [Bill Moyers.com - March 11, 2013] (*"If not for human influence, Earth would be in a very cold period today"*)

**[Earth is warmer today than during 70 to 80 percent of the past 11,300 years](#)**

[National Science Foundation - March 7, 2013] (*"It's (CO2) the only variable that can best explain the rapid increase in global temperatures"*)

**[Global warming will open unexpected new shipping routes in Arctic, researchers find](#)**

[Science Daily - March 4, 2013]

**[Why you should sweat climate change](#)** [USA Today - March 1, 2013] (*USA today special report explores how climate change is affecting Americans in a series of stories this year*)

**[Volcanic aerosols, not pollutants, tamped down recent Earth warming, says CU-Boulder study](#)**

[Eurekalert - March 1, 2013]

**[Creating science-based tools for on-the-ground climate change planning and adaptation](#)**

[SF Estuary - February 2013]

**[California Landscape Conservation Cooperative 2012 Highlights](#)** (*The California Landscape Conservation Cooperative is a management-science partnership whose mission is to inform and promote integrated science, natural resource management and conservation to address the impacts of climate change and other stressors within and across ecosystems*)

**[Study of ice age bolsters carbon and warming link](#)** [New York Times - February 28, 2013]

**[Global tipping point not backed by science, experts argue](#)** [Science Daily - February 28, 2013]

**[Climate change 'causes wild weather'](#)** [The Daily Climate - February 26, 2013]

**[AGU video: Speak up about climate change, science communicators say](#)**

[American Geophysical Union - February 25, 2013] (*five communication professionals advocate for broader participation from scientists in the discussion about climate change*)

**[Global warming may cause extremes by slowing "planetary waves"](#)**

[Reuters - February 25, 2013]

**[Global warming worries Californians](#)** [SF Gate - February 25, 2013]

**[Investors demand climate-risk disclosure in 2013 proxies](#)** [Bloomberg - February 25, 2013]

**[Weather extremes provoked by trapping of giant waves in the atmosphere](#)**

[Science Daily - February 25, 2013]

**[UN Sustainable Energy initiative could put world on a path to climate targets](#)**

[Science Daily - February 24, 2013]

**[Obama administration moves forward on climate change without Congress](#)**

[US News - February 22, 2013]

**[Warming winters: US temperature trends](#)** [Climate Central - February 21, 2013]

**[U.S. government risks financial exposure from climate change - GAO](#)**

[Reuters - February 14, 2013] (*"Climate change is a complex, crosscutting issue that poses risks to many environmental and economic systems - including agriculture, infrastructure, ecosystems, and human health - and presents a significant financial risk to the federal government"*)

**[Thinning ice is turning Arctic into an algae hotspot](#)** [Climate Central - February 14, 2013]

**[Obama to Congress: Act on climate change or I will](#)** [USA Today - February 13, 2013]

**['Huge consequences' of climate change, Syrian crisis must be faced, Ban tells think tank](#)**

[UN News Centre - February 11, 2013] (*UN Secretary-General Ban Ki-moon states that "We need national leaders who think globally. We need a stronger sense of collective responsibility. And we need the United States" in recognition of the role the U.S. can play in leading on climate change action*)

**[Security risks of extreme weather and climate change](#)** [Science Daily - February 11, 2013]

**[Sunlight stimulates release of climate warming gas from melting Arctic permafrost](#)**

[Science Daily - February 11, 2013] (*"sunlight increases bacterial conversion of exposed soil carbon into carbon dioxide gas by at least 40 percent compared to carbon that remains in the dark"*)

**[Agencies release sustainability plans, include climate change adaptation](#)**

[Bloomberg BNA - February 8, 2013]

**[letter to President Obama] [Request for National Summit on Climate Change](#)** [Society for Conservation Biology, Society for Ecological Restoration, American Fisheries Society, The Wildlife Society, American Meteorological Society, Ecological Society of America - February 8, 2013]

**[Antarctic ice core contains unrivaled detail of past climate](#)**

[Environmental Research Web - February 7, 2013]



**USA: Climate change impacts absent from FEMA's redrawn NYC flood maps**

[Prevention Web - February 6, 2013]

**CNN shake-up provides opportunity for improvement on climate change**

[Media Matters - February 6, 2013]

**Climate change series at U Maine Farmington explores evidence of change**

[Morning Sentinel - February 6, 2013] (*archaeologists look at evidence of how people responded to climate change in the past, and give hope regarding our ability to adapt to it in the future*)

**Head of International Monetary Fund: Climate change is 'the greatest economic challenge of the 21st century'** [Mongabay - February 6, 2013]

**New York waves white flag to climate change: Move humans out of the way**

[Sustainable Business.com - February 5, 2013]

**Fault lines in views on climate change revealed: Divided by cause, united by effect**

[Science Daily - February 4, 2013]

**Stanford Arctic thawing detection tool** [SF Gate - February 3, 2013]

**Climate action could halve energy firms' worth - bank** [The Daily Climate - February 2, 2013]

**Departing Energy secretary offers climate warning** [The Hill - February 1, 2013] (*Steven Chu resigned with a message that "we have a moral responsibility to the most innocent victims of adverse climate change" and also that "prudent risk management does not equate uncertainty with inaction"*)

**Nicholas Stern: I got it wrong on climate change - it's far, far worse**

[The Energy Collective - January 30, 2013] (*the author of the famous 'Stern Review on the Economics of Climate Change' now states that he underestimated the risks in his 2006 book, and would now have been "much more strong about the risks of a four- or five-degree rise"*)

**A complex constellation: Displacement, climate change, and Arctic people**

[Brookings - January 30, 2013]

**The Tyee's Crash Course in Climate Change** [The Tyee - January 2013] (*Vancouver science writer Eric Nadal covers the basics of climate change in an eight part series*)

**Climate change: No more denying it** [CBS News - January 26, 2013]

[Kerry says global climate change is threat to U.S.](#) [Washington Post - January 24, 2013]

[Greenland ice cores reveal warm climate of the past](#) [Science Daily - January 23, 2013]

[Unprecedented glacier melting in the Andes blamed on climate change](#)

[Science Daily - January 22, 2013]

[Release of National Climate Assessment review draft: Roundup of media coverage](#)

[Climate Science Watch - January 19, 2013]

[Green desert: Climate changes disrupt Southwest](#) [My Desert - January 19, 2013]

[Tiny solar activity changes affect Earth's climate](#) [Space.com - January 16, 2013]

[Black carbon ranks as second-biggest human cause of global warming](#)

[Washington Post - January 15, 2013]

[World warm last year, but not like record US heat](#) [Salon.com - January 15, 2013] (*"the last time the world had a cooler than average year was 1976...that means more than half of the people on Earth haven't lived during a cooler than normal year for the globe"*)

## Images to Ponder

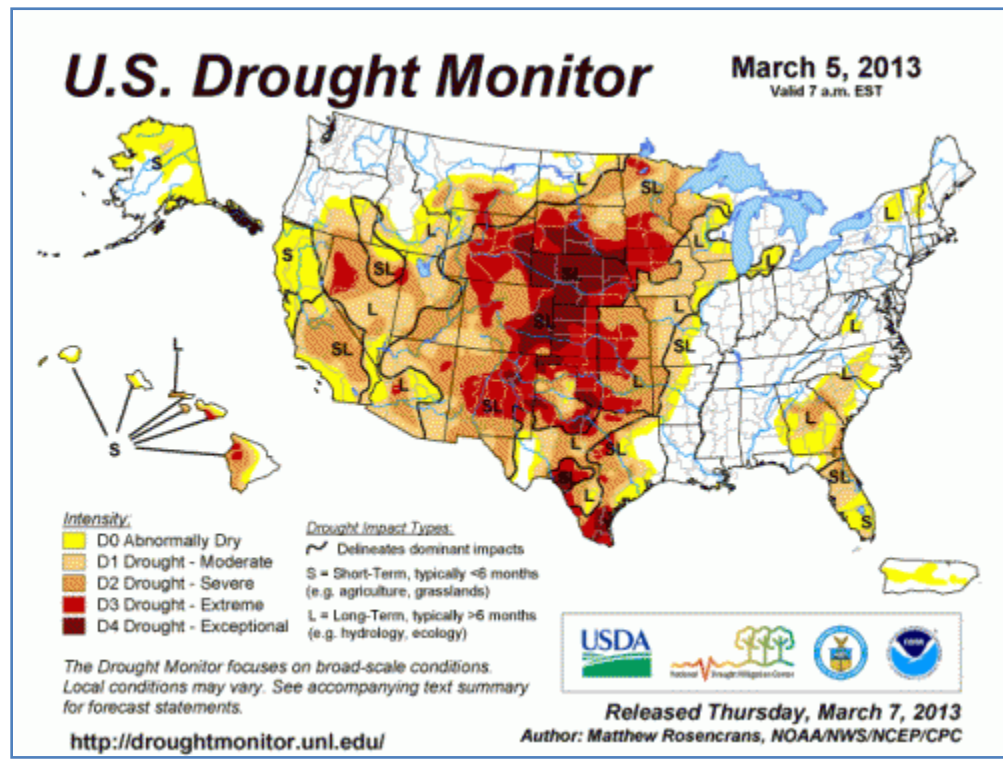


Image credit: [http://www.climatecentral.org/news/u.s.-drought-intensifies-in-texas-and-florida-15708?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+ClimateCentral-News+Climate+Central+-+News](http://www.climatecentral.org/news/u.s.-drought-intensifies-in-texas-and-florida-15708?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+ClimateCentral-News+Climate+Central+-+News)

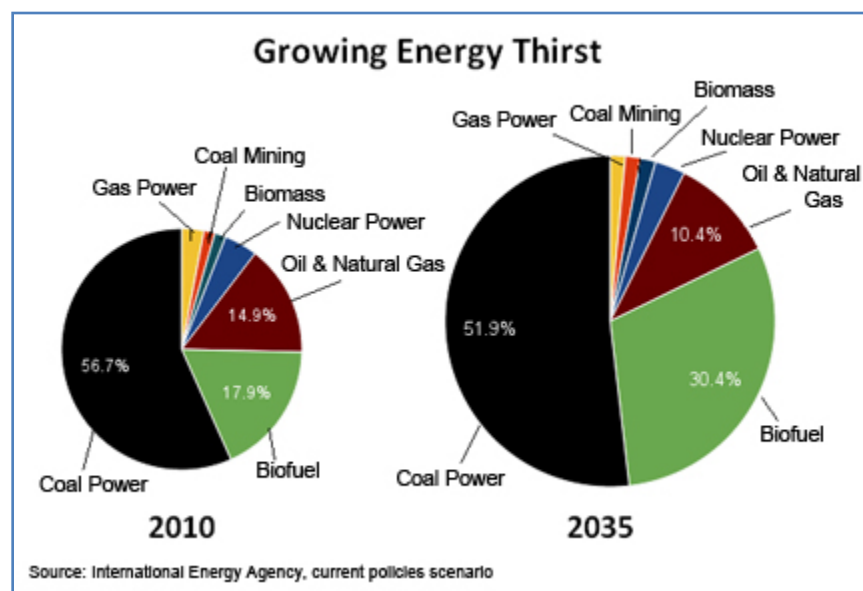


Image credit: <http://news.nationalgeographic.com/news/energy/2013/01/130130-water-demand-for-energy-to-double-by-2035/>

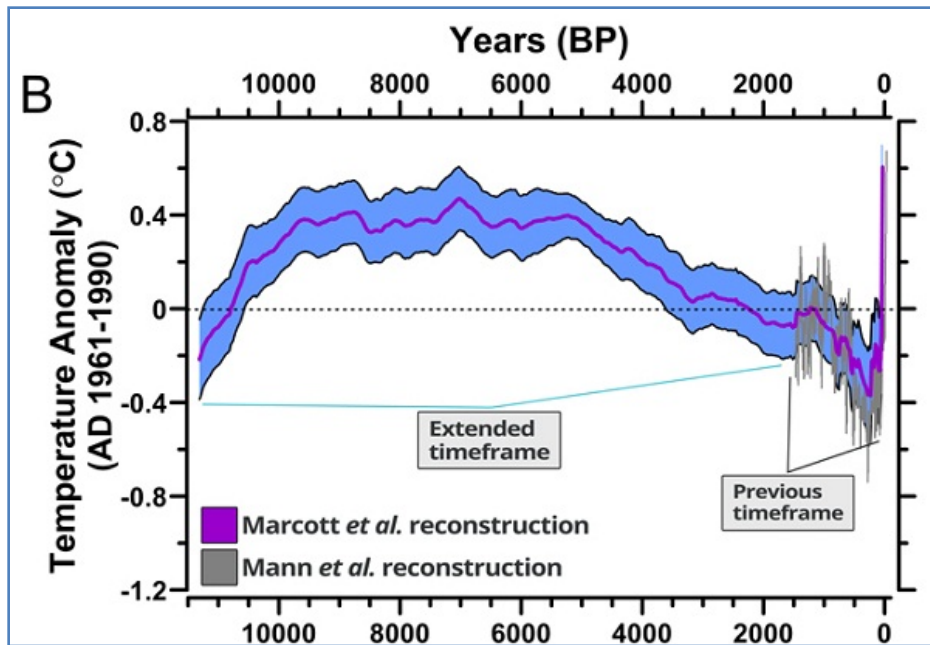


Image credit: <http://blogs.scientificamerican.com/plugged-in/2013/03/19/earth-has-been-this-warm-before-whats-different-now/>

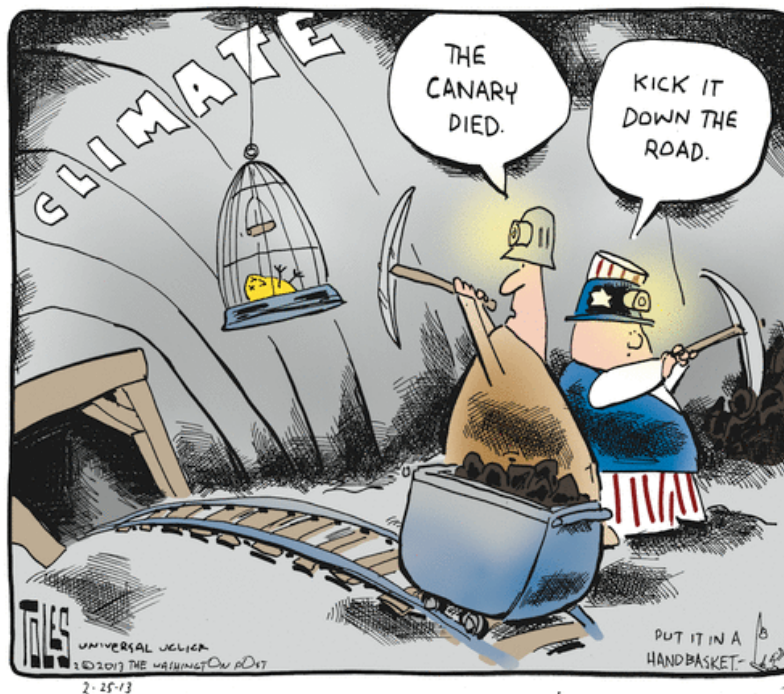


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